



PROJECT PROGRESS REPORT

**PREPARED FOR THE ALASKA ENERGY AUTHORITY BY
THE ALASKA CENTER FOR ENERGY AND POWER**

PROJECT TITLE: *Round 1: Emerging Energy Technology Fund – Data Collection*

REPORTING PERIOD: 4th Quarter 2017

DATE OF REPORT: January 24, 2018

GRANT RECIPIENT: Alaska Center for Energy and Power
University of Alaska Fairbanks
P.O. Box 755910
1764 Tanana Loop, Suite 404
Fairbanks, AK 99775

Anchorage office:
1901 Bragaw Street, Suite 301
Anchorage, AK 99508

EETF Round 1 Projects

Project #003 – Alaska Division of Forestry, Biomass Reforestation

This project remains in the same status as the past several quarters. ACEP currently has a draft final report written but is awaiting additional information from the project. We have not been informed of more recent updates from AEA or the project participants.

Project #006 – Arctic Sun, Arctic Thermal Shutters and Doors

This project has reached completion. ACEP has completed its final report with input from AEA and will be publishing it in glossy format and linking it to the ACEP website.

Project #009 – Genesis – Ultra-Efficient Generators and Diesel-Electric Propulsion

This project was concluded at its current stage of development. ACEP is working on the final report.

Project #026 – Cold Climate Housing Research Center (CCHRC), Ground Source Heat Pump (GSHP)

This project has reached completion. ACEP has received the final report from CCHRC and is reviewing it.

Project #028 – University of Alaska Fairbanks (UAF), Organic Rankine Cycle (ORC)

ACEP is working on the final report.

Project #029 – University of Alaska Fairbanks, Exhaust Thimble

This project has reached completion. ACEP has completed its final report with input from AEA and will be publishing it in glossy format and posting the report to the ACEP website.

Project #035 – Altaeros, Airborne Wind Turbine

ACEP is working on the final report.

Project #037- Oceana, Hydrokinetics; Project #043 – Ocean Renewable Power Corporation (ORPC), Hydrokinetics; Project #058 – Boschma Research Inc. (BRI), Hydrokinetics

These projects have reached completion, with the exception of ongoing work with Oceana in the ACEP Power Systems Integration Laboratory. ACEP will complete its final report after all work with Oceana is finished.

Project #045 – Hatch, Flywheel

This project has reached completion. ACEP has completed its final report with input from AEA and will be publishing it in glossy format and posting the report to the ACEP website.

Project #049 – Intelligent Energy Systems (IES), Self-Regulated Grid; Project #051 – Intelligent Energy Systems (IES), Wind-Diesel-Battery Hybrid System

These projects have reached completion. ACEP submitted a draft version of its final report for the wind-diesel-battery hybrid system to AEA for review. A draft report for the self-regulated grid has been submitted for review.

Project #061 – Marsh Creek, Various Speed Diesel-Electric Generation

ACEP is working on a final report.

Additional Project – Northwest Arctic Borough, Arctic Field Testing and Power Curve Verification of Eocycle 25 kW Wind Turbine

This project has reached completion. ACEP is working on a final report.